

# IHS Epidemiology News

Indian Health Service National Epidemiology Program

Volume 3, November 2000

## What is Surveillance?

By James E. Cheek, M.D., MPH

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The only time most people hear the term surveillance is on some TV detective show. To epidemiologists, however, it is a familiar and often-used concept. Instead of tracking the "bad guys" we look for the "bad health problems," such as communicable diseases, cancer, or even injuries. The technical definition of public health surveillance is "... ongoing systematic collection, analysis, and interpretation of outcome-specific data for use in the planning, implementation, and evaluation of public health practice."<sup>1</sup> If epidemiology provides the scientific foundation for public health, then surveillance must be the soil upon which we build.

Why do epidemiologists always want to do surveillance? It's not out of a desire to be nosy and intrude on peoples' privacy. The following analogy with clinical medicine tries to explain this. When you visit your doctor, what is the first thing that happens?

The assistant takes your vital signs, or measures your blood pressure, and checks your temperature, pulse rate, and weight. Public health surveillance is the equivalent of taking the vital signs of a community. It gives key information on the health of the members of that community, as well as indicating health problems that may need to be addressed. This type of information is so important that, in most places, there are laws that require health care workers to report a long list of medical conditions to the local public health authorities.

Surveillance starts at the local clinic where the patient is seen with a reportable condition. A health care provider, such as a nurse, physician, infection control practitioner or a laboratory worker, will send a written or telephonic report. The first stop for some reports is the local public health office, usually the county or tribal health facility that will respond to the report. All reports, however, eventually end up at the state health department to be compiled and analyzed. Some conditions require a response at

(continued on page 2)



## Upcoming Meetings:

**Nov. 16-17, 2000;** Aberdeen Area  
STD/HIV/Hepatitis mtg, Pierre, SD



**Nov.29 - Dec. 1, 2000;** CDC/  
ASTCDPD 15th Nat'l Chronic  
Disease Conf., Washington, DC



**Dec. 3-7, 2000;** Nat'l STD Conf.,  
Milwaukee, WI



**Feb. 22, 2001;** CDC Budget  
Planning, Atlanta, GA



**Mar. 19-21, 2001;** IHS Advanced/  
Refresher Colposcopy Workshop,  
Albuquerque, NM



**Apr. 23-25, 2001;** Tentative IHS  
Research Conf., Albuquerque, NM



**Apr. 26-27, 2001;** Tentative  
Tribal Epi Centers' Annual Mtg.,  
Albuquerque, NM



**May 29 - June 1, 2001;** 35th Nat'l  
Immunization Conf., Atlanta, GA

## Surveillance (continued from page 1)

that level, sometimes in the form of additional funding from the federal government. Weekly, all state health departments electronically send their surveillance data, minus peoples' names, to the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. CDC maintains all this information in the National Notifiable Disease Surveillance System from which weekly reports are generated for the *Morbidity and Mortality Weekly Report*, the *MMWR*. CDC doesn't have a separate "federal" surveillance system; they rely on the states to send them data.

Obviously, surveillance data contain information as private as that found in your medical records. To protect people from misuse of data, all state governments that perform public health surveillance have strict laws protecting privacy and confidentiality. Unfortunately, many tribal governments do not yet have similar laws and relatively few tribal health programs actively undertake public health surveillance. Those that are beginning to collect data are also developing protective laws to prevent any misuse or compromises to confidentiality. Because Tribal Epidemiology Centers (see article, Page 6) work under a Cooperative Agreement with the IHS National Epidemiology Program, they are held to the same high standards of confidentiality of the Federal Privacy Act as federal health care workers.

<sup>1</sup> Thacker SB, Berkelman RL. Public health surveillance in the United States. *Epidemiol Rev* 1988;10:164-90.



## Hantavirus and zoonotic diseases

Our program on hantavirus and zoonotic disease prevention was recently joined by Mark DiMenna. Mark is a doctoral student at the John Hopkins School of Hygiene & Public Health. His interest lies in Geographic Information Systems (GIS) based applications of satellite data in predicting areas of high risk for human exposure to zoonotic disease.

Dr. Cheek, Dr. Greg Glass and others are applying GIS analysis in the Four Corners area to predict years of increased hantavirus exposure risk. Along with Dr. Ken Gage's group, at CDC in Ft. Collins, Mark hopes to expand this analytic method to determine if the human risk of plague exposure can be measured and predicted in a region based on satellite imagery. He's studying how differences in transmission and reservoir ecological dynamics of each disease influence patterns of exposure risk. He is also trying to understand why the predictive model might break down in years such as this, where an unexpectedly high number of late-season HPS cases appeared in a dry, presumably low-risk year.

In addition, Mark is helping to supervise part of a rodent-proofing intervention orchestrated by CDC in a high risk area for hantavirus to reduce exposure to rodent reservoir species.



## IHS Colposcopy News

IHS' 2001 Advanced/Refresher workshop is set for March 19-21 in Albuquerque, NM.

The Basic and Advanced/Refresher workshops are now offered in alternate years.

The Colpo Advanced/Refresher course is designed to review and update the diagnosis and management of preinvasive neoplasia of the female genital tract. It's directed towards colposcopists in IHS, urban, and tribal programs and will benefit both experienced and new colposcopists (still in preceptorship).

**Tuition is \$300.** This will be waived for attendees from IHS facilities or those tribes who left their tribal shares with the IHS Cancer Program and they will also be reimbursed for travel. Please contact Roberta Paisano at: 505-248-4132 or e-mail: [roberta.paisano@mail.ihs.gov](mailto:roberta.paisano@mail.ihs.gov)

*"Registration is limited and*

*on a first come, first served*

*basis. All applications should*

*reach us by Feb. 21, 2001."*



*Small discussion breakout, IHS 2000 Basic & Advanced/Refresher Colposcopy Workshop.*



Attendees at first training, 1995

## Training for AI/AN Cancer Support Group Leaders is Available

The IHS Epidemiology Program continues to sponsor training for AI/AN people interested in starting cancer support groups in their own communities. The training is being conducted in conjunction with the

People Living Through Cancer organization (Albuquerque, NM) and A Gathering of Cancer Support (ACGS) group (Santo Domingo Pueblo, NM). The 4½-day training format includes lecture/discussion, simulation, and education materials. The ideal support group leader is a cancer survivor, a family member, or a close friend who has shared the cancer experience.

The first training was held in January 1995 and earlier this month marked the end of our ninth training. Approximately 80 people have been trained with a few attending at their own expense including two from Canada. At least half of these people have gone back to offer some form of cancer support, several actually initiating cancer support groups based on the ACGS model.

Another training is planned in 2001, but no dates have been set yet. Our program will provide reimbursement for travel, tuition, and expenses for a limited number of people. For more info, please contact Roberta Paisano by phone: 505-248-4132 or e-mail: [roberta.paisano@mail.ihs.gov](mailto:roberta.paisano@mail.ihs.gov)

## Women's Health Information

The Navajo Nation Department of Health BCCEDP received an additional \$300,000 for screening services going into their 5th year of a 5-year cooperative agreement award from CDC. The increase was due to the hard work of Project Director, Sally Joe, and her staff in increasing the numbers of women screened and providing quality case management.

Four states have been identified by CDC to receive additional funds for their respective screening programs targeting American Indian women. They are South Dakota, North Dakota, Montana, and Wisconsin.

Patch 7 of the Women's Health Software Package (WHSP) is now available for downloading. This patch has updated page 2 of the screening and diagnostic test results for each woman screened at IHS sites. Speaking of WHSP, the National Program office facilitated a training in Albuquerque this past Spring. For further information on the WHSP, please contact your IMS site manager. For training opportunities, contact your area office women's health care coordinator.

It is time to start thinking about the next 5-year cooperative agreement for Breast and Cervical cancer screening which will be announced next spring. For more info, please contact Don Reece at (505)248-4135.



CHRs: Sid Kills in Water, Shirley Roan Eagle, Simone Lambert, and Lorraine Walking Bull. Not pictured: Linda Kills in Sight & John Thompson.

## Antimicrobial Resistance

**Update on MRSA Study:** The IHS hospital in Rosebud, SD as well as other clinics in the Northern Plains reported a high number of infections with methicillin-resistant *Staphylococcus aureus* (MRSA) over the past few years, leading to concern among health care providers.\* To identify risk-factors and routes of transmission of MRSA in the community, the IHS National Epidemiology Program (NEP) developed a research protocol for a case/control study. This protocol was approved by the Aberdeen IRB and the Rosebud Lakota Sioux tribe in July, and both the Service Unit and Tribal Health Division have expressed their support of the project. Roxane Myers, temporary on-site coordinator, spent the month of July working with the health care staff and the community in preparation for the study, and at the end of July, Dr. Jim Cheek and Chris Hammond (NEP) went to Rosebud to begin enrolling participants in the

study. Since then staff from NEP have made two more trips to Rosebud, and to date over 200 people have been enrolled. Staff from NEP will continue to make monthly visits for the next 6 months (weather permitting, of course.) For more info, please contact Amy Groom at (505) 248-4226.

We would like to thank the community for their support of this project, and would especially like to acknowledge the tireless efforts of the CHRs (pictured above) who worked overtime during evenings and weekends to help us. Special thanks as well to the Public Health Nursing Program, the Medical Records staff and other staff at the hospital who have made it possible to carry out this project.

\* Because MRSA may be resistant to multiple antibiotics, infections with MRSA can be very difficult to treat.

**Update on Pneumococcal Project:** Chris Hammond's invasive pneumococcal project, examines the incidence of pneumococcal bacteremia and meningitis in the IHS user population from 1980 to 1997 and is due to be completed in October. The results should help to identify areas most in need of the new conjugate pneumococcal vaccine.

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## New CDC Tobacco Control Awards

The Centers for Disease Control and Prevention (CDC), Office on Smoking and Health (OSH), recently funded six American Indian /Alaska Native tribes and organizations to develop support centers for tobacco control. The centers will assist tribes in addressing the high rates of commercial tobacco use among AI /AN populations by providing training and technical assistance, or by promoting networking, partnership building and other collaborative efforts. The awards began on September 30, 2000 for a 12-month budget period and those funded include:

- ◆ Aberdeen Area Tribal Chairmen's Health Board
- ◆ Alaska Native Health Board
- ◆ California Rural Indian Health Board
- ◆ Inter-tribal Council of Arizona, Inc.
- ◆ Muscogee Creek Nation
- ◆ Northwest Portland Area Indian Health Board



The CDC OSH also funded the Northwest Portland Area Indian Health Board to work with the AI /AN priority population to plan, initiate, coordinate and evaluate tobacco use prevention and control activities. Seven other awards were made to address tobacco use prevention and control among other priority populations. Awards began on September 30, 2000 as well. **Congratulations to all.**

Lorene Reano, assigned from CDC OSH to the IHS Epi Program, will be the project officer for these new cooperative agreements. She can be reached at (505) 248-4132.



## Sexually Transmitted Disease (STD) Control

Laura Shelby and Rachel Pacheco continue to creatively expand and enhance the STD Program. Innovative chlamydia programs have been implemented targeting populations not routinely screened yielding substantial numbers of chlamydia cases. Because chlamydia often causes asymptomatic infections, most of these patients would never have been screened and/or treated. Examples of pilot projects have included screening women requesting pregnancy tests, men receiving work-related physicals, and youth receiving sports physicals.



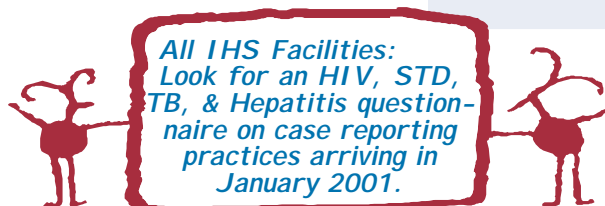
On May 17-18, 2000, the State health department STD/HIV programs from the Four Corners, IHS physicians, public health nurses, Navajo Nation's Social Hygiene Program & AIDS Office, and the IHS National Programs' offices of STD, HIV, & Hepatitis (S/H/H) met in Albuquerque, NM. CDC Project Officers for NM and AZ were also invited to this meeting. The objectives of the meeting were to discuss, existing S/H/H control policies, the integration of Navajo Nation STD/HIV/TB programs, the integration of S/H/H on the national level, the improvement of surveillance systems, and relationships between tribal, IHS and state entities.

Several areas of concern were identified and a work group was formed to tackle these issues. One specific outcome of the meeting was recognition of the importance of collaboration between the various programs in providing state-of-the-art services. A similar meeting between the Aberdeen IHS Area and the Nebraska, North Dakota, and South Dakota State Health Departments will be held in Pierre, SD on Nov.16-17.

**Congratulations** to the following people who were recognized for their outstanding contributions to STD services:

- ◆ Tom Davis, Dallas STD Training Center;
- ◆ Larry Foster, Navajo Nation Social Hygiene Program; and
- ◆ Greg Wood, HIV Center of Excellence, Phoenix Indian Medical Center.

WELCOME to Shawn Jackson! Shawn is the new STD Program Coordinator at the Northwest Portland Area Indian Health Board. He previously worked for the Red Talon HIV Project. He is a member of the Klamath Tribe from Chiloquin, OR. We're glad he's on-board. He can be reached at (503)228-4185, ext. 288.



## STD/HIV/Hepatitis Team

Because STDs, HIV, and Hepatitis B and C are spread in similar ways among at-risk people, the Epi Program recently formed a team to improve understanding of the impact of HIV, STD, viral hepatitis among AI/ANs and to assist with prevention activities. The team is composed of Dr. Jeanne Bertolli, Rachel Pacheco, Laura Shelby, and Dr. Doug Thoroughman. Jeanne recently joined the Epi Program from the National Center for HIV, STD, and TB Prevention at CDC after having worked for 6 years with CDC's Division of HIV/AIDS Prevention in Atlanta and overseas. Dr. Bertolli will serve as team leader to coordinate prevention and surveillance activities for these diseases. Dr. Bertolli is working on establishing a group of tribal advisors to counsel the team about disease monitoring; a survey of urban AI/ANs about behavior that may put them at risk of becoming infected with HIV, STDs, or viral hepatitis; and an evaluation of how well IHS is able to monitor these disease conditions, and how this information can be used to obtain funding for prevention programs, to track progress of these programs, and to develop health budgets.

## Web-based Training for improving STD surveillance

To support improved surveillance and clinical care for STDs, a web-based software program, I Dweb, is being modified to track provider and clinic performance measures by members of the IHS Epidemiology Program and the Cereplex company. Surveillance for STDs is often hampered by health providers' underutilization of screening tests and poor reporting. Performance feedback and training have been shown to improve the quality of care given by providers. I Dweb will use data already collected in IHS computerized databases. I Dweb will offer monthly feedback and training to participating clinics and providers. It will be evaluated after six months of operation. For more info, please call Laura or Jeanne at (505) 248-4226.



## New Office Staff

We have a few new faces in our office but first we had to say good-bye to a few as well. Dr. Jennifer Giroux, EIS Officer, completed her tour of duty in July. Those two years really flew by and her assistance on many different projects was greatly appreciated. Jennifer's now at the University of Minnesota working on her MPH. Ms. Leslie Randall left to pursue a doctorate at the University of North Carolina - Chapel Hill. Joan Takehara, Immunization Coordinator, retired in July. We wish them all well in their future endeavors.

Welcome to Jeanne Bertolli, Ph.D., David Espey, M.D., and Richard Leman, M.D. Dr. Bertolli came to our program in June to assist with HIV, STD and Viral Hepatitis prevention projects. Dr. Espey also joined us in June and is working with the Cancer Program on data surveillance. Because of our previous success with the EIS Program at CDC we applied for another EIS Officer and were fortunate to get Dr. Leman. Dr. Leman has already been out in the field tackling projects in outbreak investigations and disease surveillance.



Jeanne Bertolli, Ph.D.

David Espey, M.D.

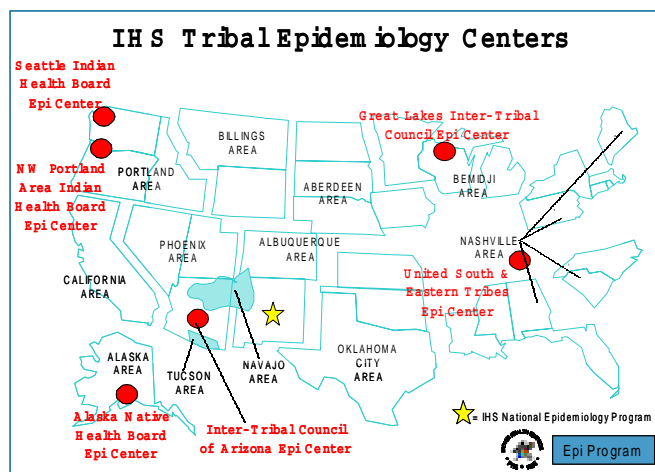


Richard Leman, M.D.

## Tribal Epi Centers' News

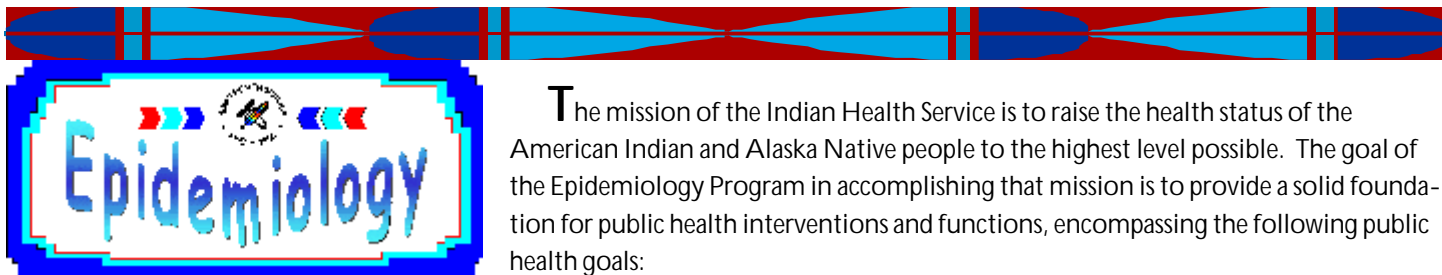
A new cycle of Cooperative Agreements was just announced for the Tribal Epidemiology Centers Program. The Alaska Native Health Board, Great Lakes Inter-Tribal Council, Inter Tribal Council of Arizona, and the Northwest Portland Area Indian Health Board received continuation funds for the next five years. Congratulations to the new Epi Centers: United South and Eastern Tribes, and Seattle Indian Health Board. (See map.) The Seattle group will collaborate with other Urban Indian health centers to study disease patterns among Urban Indians nationwide.

Funding levels remain well below the estimated \$500,000 needed to support an epidemiology center, but this fiscal year, IHS received additional funds and for the first time, CDC made a contribution from the National Center for Chronic Disease Prevention and Health Promotion. The FY2001 IHS Budget includes a small increase for Epidemiology, all of it earmarked for HIV research. Our goal over the next two to three years is to secure adequate funding to support eight regional Epi Centers.



## Hepatitis

The Epidemiology Program expanded its staff in July, 1999 to include Doug Thoroughman, Ph.D., a CDC Hepatitis Branch Field assignee. Doug previously spent two years with our program as an EIS officer and has come back to focus on hepatitis issues in AI/AN communities, nationally. Doug is working on several projects involving hepatitis A. These include assessing the effectiveness of hepatitis A vaccination in our population, evaluating the surveillance system, evaluating provider practices on hepatitis A vaccination, and completing a CDC slide presentation for use by IHS hepatitis coordinators. Doug's next emphasis will be hepatitis C, in particular, looking at risk factors, screening and treatment recommendations, and vaccination strategies for those with hepatitis C. Doug has conducted several presentations on hepatitis A and C to service units and tribal organizations during his first year and has been involved in guiding national vaccination policies through the Advisory Committee on Immunization Practices. He is available to lead or assist with hepatitis-related outbreak investigations, vaccination and education efforts, as well. Doug encourages those with questions or potential projects to contact him and get acquainted. Phone: (505) 248-4226.



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#### **Epi Program Staff:**

Chronic Disease: Nat Cobb, Ben Muneta, &  
Roberta Paisano  
Tobacco Control: Lorene Reano  
Cancer Control/Women's Health: Don  
Reece, David Espey, & Bobbie Peppers  
Infectious Disease: Jim Cheek & Amy  
Groom  
Hepatitis: Doug Thoroughman  
HIV/STD: Jeanne Bertolli  
STD/Chlamydia: Laura Shelby &  
Rachel Pacheco  
Senior CDC/ATSDR Tribal Liaison: Ralph  
Bryan  
EIS Officer: Richard Leman  
Support Staff: Ellen Ortiz, Leslie  
Baumgardner, Michelle Bowser, &  
Audrey Lamy

The mission of the Indian Health Service is to raise the health status of the American Indian and Alaska Native people to the highest level possible. The goal of the Epidemiology Program in accomplishing that mission is to provide a solid foundation for public health interventions and functions, encompassing the following public health goals:

- Prevention of epidemics and the spread of disease
- Protection against environmental hazards
- Prevention of injuries
- Promotion and encouragement of healthy behaviors
- Responding to disasters & assisting communities in recovery
- Assuring the quality and accessibility of health services

Our objectives are to describe causes of morbidity and mortality, identify risk factors for disease, and prevent and control disease. Disease control and prevention activities of this program target both chronic and infectious diseases. Services available include: data management & reporting, community surveys, emergency response, surveillance, liaison, training, and consultation to clinicians. Most services are at no cost. Applied epidemiological research and policy development are also available.



## **CDC Update and Perspectives....**

This newsletter highlights new and ongoing CDC-IHS-Tribal partnerships that focus on specific diseases or health problems. Many of these activities reflect a closely integrated team approach that encompass the nine CDC public health professionals currently assigned to the IHS Epi Program in Albuquerque. Field assignees form a core component of CDC's overall efforts to help improve the public health of AI /AN communities.

CDC has also shown a vested interest in the Tribal Epi Centers (TECs) Program, primarily through technical assistance. This year, however, CDC's Center for Chronic Disease Prevention & Health Promotion expanded that by 1) contributing \$75,000 to support the two newest TECs, and 2) assigning a CDC field assignee to the NWPAl HB Epi Center. In the FY 2002 budget initiative, CDC specifically requested funds to broaden its support of, and solidify its commitment to, the TECs.

Other exciting developments are afoot at CDC such as the addition of its new Deputy Director for Science and Public Health, Dr. David Fleming. One of his first official acts was to represent CDC at the DHHS National Tribal Consultation Forum in Washington, D.C., where he spoke eloquently about CDC's strong commitment to AI /AN public health. With support from CDC Director, Dr. Jeff Koplan, Dr. Fleming will lead the CDC team that will work with IHS senior-level counterparts in a working group aimed at better coordinating and prioritizing working relationships.

In his comments in Washington, Dr. Fleming pointed out that CDC now has a more visible role within the Office of the Associate Director for Minority Health (Dr. Walter Williams). Mr. Dean Seneca (AI /AN Program Specialist; zkg8@cdc.gov) in Atlanta & Dr. Ralph Bryan (Senior CDC/ATSDR Tribal Liaison; rrb2@cdc.gov) in Albuquerque report directly to Dr. Williams and both serve as official points of contact for CDC on AI /AN issues. They are committed to keeping AI /AN perspectives visible within the organization. Readers should feel free to contact them at anytime.

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Happy  
Holidays  
from the  
IHS  
National  
Epi Staff !!



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